



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

28317

7590

07/28/2009

AT&T LEGAL DEPARTMENT - BW
ATTN: PATENT DOCKETING
ONE AT&T WAY
ROOM 2A-207
BEDMINSTER, NJ 07921

EXAMINER

BATURAY, ALICIA

ART UNIT

PAPER NUMBER

2446

DATE MAILED: 07/28/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,142	01/11/2002	Wei Lin	03493.00296	5828

TITLE OF INVENTION: ENHANCED CHANNEL ACCESS MECHANISMS FOR AN HPNA NETWORK

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$1510	\$1510	10/28/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax **(571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

28317 7590 07/28/2009
AT&T LEGAL DEPARTMENT - BW
ATTN: PATENT DOCKETING
ONE AT&T WAY
ROOM 2A-207
BEDMINSTER, NJ 07921

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/042,142

01/11/2002

Wei Lin

03493.00296

5828

TITLE OF INVENTION: ENHANCED CHANNEL ACCESS MECHANISMS FOR AN HPNA NETWORK

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$1510	\$1510	10/28/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
BATURAY, ALICIA	2446	709-236000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/042,142

01/11/2002

Wei Lin

03493.00296

5828

28317

7590

07/28/2009

AT&T LEGAL DEPARTMENT - BW
ATTN: PATENT DOCKETING
ONE AT&T WAY
ROOM 2A-207
BEDMINSTER, NJ 07921

EXAMINER

BATURAY, ALICIA

ART UNIT

PAPER NUMBER

2446

DATE MAILED: 07/28/2009

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1305 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1305 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.

10/042,142

Examiner

Alicia Baturay

Applicant(s)

LIN ET AL.

Art Unit

2446

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 14 April 2009.
2. ☒ The allowed claim(s) is/are 1-61 and 80-92 renumbered as 1-74.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date
10/05/2005,12/09/2005,11/17/2006,12/21/2007,08/05/2008,01/14/2009,01/26/2009,03/12/2009,06/05/2009
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Continuation of Attachment(s) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date:

Allowance

1. The amendment filed on 14 April 2009 has been considered.
2. Claims 62-79 are cancelled.
3. Claims 1-61 and 80-92 are allowed.

Examiner's Amendment

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
5. Authorization for this examiner's amendment was given in a telephone interview with Michael Haynes (Reg. #40,014) on 29 May 2008.
6. The application has been amended as follows:
In the Claims: Claims 1, 18, 32 and 80 have been amended.

Claim 1 (Currently Amended)

Line 9 "an HPNA 2.0 frame" has been replaced with **–an HPNA v2 frame–**.

Line 10 "the Backoff Signal Slot 0 one of" has been replaced with **–the Backoff Signal Slot 0 is one of–**.

Claim 18 (Currently Amended)

Line 10 "HPNA 2.0 frame" has been replaced with **–HPNA v2 frame–**.

Line 11 "0 one of" has been replaced with **–0 is one of–**.

Claim 32 (Currently Amended)

Line 2 "a communications medium" has been replaced with **–a telephone-wire-based communications medium–**.

Line 5 "a Media Control Station (MC STA) maintaining" has been replaced with **–a Media Control Station (MC STA) device maintaining–**.

Line 8 "an HPNA 2.0 frame" has been replaced with **–an HPNA v2 frame–**.

Line 9 "the Backoff Signal Slot 0 one of" has been replaced with **–the Backoff Signal Slot 0 is one of–**.

Claim 80 (Currently Amended)

Line 11 "an HPNA 2.0" has been replaced with **–an HPNA v2–**.

Line 12 "the Backoff Signal Slot 0 one of" has been replaced with **–the Backoff Signal Slot 0 is one of–**.

In the Specification: pages 1, 9 and 10 have been amended.

Page 1, paragraph 01

This application claims priority to provisional U.S. Application Ser. No. 60/269,354, entitled "Enhanced Channel Access Mechanisms For A QoS-Driven HPNA Network," invented by Wei Lin and Matthew Sherman, filed February 20, 2001, and provisional U.S. Application Ser. No. 60/269,861, entitled HPNA 3.0 channel access mechanism for compatibility with HPNA 2, invented by Matthew J. Sherman, filed February 21, 2001, both of which are incorporated by reference herein. The present application is also related to U.S. Patent Application Serial No. (~~Atty Docket No. IDS 2000-0672B, 3493.00297~~) 10/042,165, now U.S. Patent No. 7,298,757, U.S. Patent Application Serial No. (~~Atty Docket No. IDS 2000-0672C, 3493.00298~~) 10/042,179, now U.S. Patent No. 7,293,103, U.S. Patent Application Serial No. (~~Atty Docket No. IDS 2000-0672E, 3493.00326~~) 10/042,166, now U.S. Patent No. 7,310,326, and pending U.S. Patent Application Serial No. (~~Atty Docket No. IDS 2000-0672A, 3493.00337~~) 10/042,143, each entitled "Enhanced Channel Access Mechanism For QoS-Driven HomePNA (HPNA 2.1), each filed on December 19, 2001, and each incorporated by reference herein.

Page 9-10, paragraph 26

The medium access techniques of the present invention maybe used by an enhanced STA separately or in combination for gaining preferential access to the HN communications medium. Additionally, the preferential medium access techniques of the present invention

can be used in conjunction with the centralized medium access techniques disclosed by U.S. Patent Application Serial No. 09/616,900, now U.S. Patent No. 6,862,270, entitled "An Architectural Reference Model For QoS-Driven Wireless ~~LANs~~ LANs," invented by J.-M. Ho; to U.S. Patent Application Serial No. 09/616,901, now U.S. Patent No. 6,804,222, entitled "An In-Band QoS Signaling Reference Model for QoS-Driven Wireless LANs," invented by W. Lin and J.-M. Ho; to U.S. Patent Application Serial No. 09/617,083, now U.S. Patent No. 7,151,762, entitled "Virtual Streams for QoS-Driven Wireless LANs," invented by J.-M. Ho and W. Lin; to U.S. Patent Application Serial No. 09/616,897, now U.S. Patent No. 6,970,422, entitled "Admission Control for QoS-Driven Wireless LANs," invented by W. Lin and J.-M. Ho; to U.S. Patent Application Serial No. 09/616,896, entitled "Frame Classification for QoS-Driven Wireless LANs," invented by J.-M. Ho and W. Lin; to U.S. Patent Application Serial No. 09/617,493, now U.S. Patent No. 6,850,981, entitled "Frame Scheduling for QoS-Driven Wireless LANs," invented by J.-M. Ho and W. Lin; to U.S. Patent Application Serial No. 09/617,494, now U.S. Patent No. 6,999,442, entitled "RSVP/SBM Based Down-Stream Session Setup, Modification, and Teardown for QoS-Driven Wireless LANs," invented by J.-M. Ho and W. Lin; to U.S. Patent Application Serial No. 09/616,878, now U.S. Patent No. 7,068,632, entitled "RSVP/SBM Based Up-Stream Session Setup, Modification, and Teardown for QoS-Driven Wireless LANs," invented by J.-M. Ho and W. Lin; to U.S. Patent Application Serial No. 09/617,440, now U.S. Patent No. 6,950,397, entitled "RSVP/SBM Based Side-Stream Session Setup, Modification, and Teardown for QoS-Driven Wireless LANs," invented by J.-M. Ho and W. Lin; and to U.S. Patent Application Serial No. 09/616,885,

now U.S. Patent No. 7,068,633, entitled "Enhanced Channel Access Mechanisms for QoS-Driven Wireless LANs," invented by J.-M. Ho; to U.S. Patent Application Serial No. 09/617,439, now U.S. Patent No. 7,031,287, entitled "Centralized Contention and Reservation Request for QoS-Driven Wireless LANs," invented by J.-M. Ho and W. Lin; to U.S. Patent Application Serial No. 09/616,884, now U.S. Patent No. 7,039,032, entitled "Multipoll for QoS-Driven Wireless LANs," invented by J.-M. Ho and W. Lin; each filed July 14, 2000, and each of which is incorporated by reference herein. Additionally, the present application is related to U.S. Patent Application Serial No. ~~09/597,392~~ 09/596,712, now U.S. Patent No. 6,747,959, entitled "Voice-Data Integrated Multiaccess By Self-Reservation and Blocked Binary Tree Resolution," invented by J.-M. Ho and filed June 19, 2000; and U.S. Patent Application Serial No. ~~09/596,712~~ 09/597,392, now U.S. Patent No. 6,963,545, entitled "Voice-Data Integrated Multiaccess By Self-Reservation and Stabilized Aloha Contention," invented by J.-M. Ho, and filed June 19, 2000, each of which is incorporated by reference herein.

Reasons for Allowance

7. The following is an examiner's statement of reasons for allowance: Claims 1-61 and 80-92 are allowable over the prior art of record.
8. The examiner has found that the prior art of record does not teach, suggest, or render obvious the specific combination of a method or a communications network comprising providing access to a communications medium, the communications medium being suitable for allowing use of Home Phoneline Network Association (HPNA) v2-formatted frames, each HPNA v2-formatted frame being timed to allow a plurality of physical layer priority level slots, comprising of: at least one enhanced STA adapted to always choose a Backoff Signal Slot 0 of an HPNA v2 frame during contention resolution with an HPNA v2 station, the Backoff Signal Slot 0 is one of only three Backoff Signal Slots specified under HPNA v2 for use in contention resolution after a collision (major difference in the claims not found in the prior art) as set forth in the specification and recited in independent claims 1, 18, 32, 49 and 80.
9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance OR Examiner's Amendment."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at M-Th 7am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Pwu can be reached on (571) 272-6798. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay
July 27, 2009

/Jeffrey Pwu/

Supervisory Patent Examiner, Art Unit 2446